



*Discover.*

November 6, 2013

RE: Request for Qualifications: St. Charles City Flashing Yellow Arrow Signal Improvement Project

Dear Consultant:

The City of St. Charles is interested in securing professional services for work associated with:

CMAQ-7302(652) Flashing Yellow Arrow Signal Improvement Project

The engineering responsibilities may include but are not limited to the following: The preparation of Conceptual plans, Preliminary plans, Contract plans. Design services may include, right of way plans, surveying, geotechnical investigations, public involvement, environmental and historic preservation services/permits, contract documents, assisting with the bidding process, construction support/construction inspection, utility coordination/permits and traffic controls including the preparation of PS&E and final documents.

A location map for these projects, the East-West Gateway TIP applications, and a copy of the scoring criteria that will be used as the basis for selection is attached for your information.

The project goals, basic scope, and other information are described in the attached Project Charter.

The City will supply digital aerial photography and GIS topography to the consultant selected for the project if requested. The consultant will be required to supplement this information with any necessary surveys.

DBE firms must be listed in the MRCC DBE Directory located on MoDOT's website at [www.modot.org](http://www.modot.org), in order to be counted as participation towards an established DBE Goal. We encourage DBE firms to submit letters of interest as prime consultants for any project they feel can be managed by their firm.

***Department of  
Public Works***

***Engineering Division***

City of Saint Charles  
200 North Second Street  
Saint Charles, MO 63301  
636.949.3237  
[www.stcharlescitymo.gov](http://www.stcharlescitymo.gov)

It is required that your firm's Statement of Qualification (RSMo 8.285 through 8.291) and an Affidavit of Compliance with the federal work authorization program along with a copy of your firm's E-Verify Memorandum of Understanding (15CSR 60-15.020) be submitted with your firm's Letter of Interest.

It is required that your firm be prequalified with MoDOT and listed in MoDOT's Approved Consultant Prequalification List ([http://www.modot.org/business/consultant\\_resources/documents/ConsultantPreQualList.pdf](http://www.modot.org/business/consultant_resources/documents/ConsultantPreQualList.pdf)), or your firm will be considered non-responsive.

## RFQ RESPONSE INSTRUCTIONS:

### I. Roster Requisite (MUST be included for consideration)

In satisfying ordinance compliance, a copy of the firm's State of Missouri Corporate Certificate of Authority (for each professional service applicable - i.e., Architecture, Professional Engineer, or Land Surveying), a copy of individual professional's State of Missouri Registration Certificate, and a letter of intent to assign an applicable professional (the requisite need not designate the individual) to each project awarded. (Note: If this information has been submitted previously, please indicate the date of submission.

#### Other Requisite Information:

#### A. "Subcontracted" Professional Services:

Since it is recognized that some firms do not employ all necessary professional disciplines to accomplish a given project in-house and that those firms commonly "subcontract", those firms intending to do so must forward the earlier noted roster requisite information for all firms which will be performing auxiliary "subcontracted" services. An example might be as follows:

The principle firm (Engineering) employs in-house architects, landscape architects, civil engineers (structural and highway design backgrounds) but intends to "subcontract" for geotechnical (soil analysis) services. Roster requisite information on the "subcontracted" firm(s) must be included.

#### B. Professional Liability:

The principle firm must submit an indication of existing professional liability (errors and omissions) insurance, or the ability to obtain such insurance, in an amount sufficient to cover the estimated construction cost of the project or \$2 million whichever is less.

The principle firm is expected to provide such additional coverage as may be necessary to cover any "subcontracted" services.

### II. INITIAL SELECTION FACTOR INFORMATION

The following considerations are intended to be evaluated by the Review Group. The below listings are not in any order of priority.

#### A. General experience and capabilities in the type of work required:

1. Preparation of construction plans for roadway construction
2. Construction cost efficiency (value engineering)
3. Familiarity with design requirements
4. Professional staff

B. Quality of previous projects performed for the City of St. Charles describing that past project delivery has been:

1. On Time
2. On Budget
3. With Quality

C. Recent Experience:

1. Provide a list of your firm's last five similar projects\*.
2. Record of project time – estimate vs. actual for design and construction.
3. Accuracy of construction cost estimates for the previously listed projects. Include the engineers estimate, low bid, and final construction cost.
4. Name of the representative project manager(s) for your firm on each described project.

D. Community Relations:

1. Experience with community relations including evidence of sensitivity to citizen concerns (i.e., reaction to neighboring and concerned citizen comments reflected in design change and/or public explanation, etc.)
2. Explanation of community relations approach for this project

E. Technical Approach:

Describe your firm's technical approach to the project including how your firm can achieve the project goals, deal with the project conditions, and meet the project standards. Include any other project information you may feel is relevant or important for consideration.

F. Current workload and adequate staffing:

1. Provide a list of current projects and their anticipated completion schedules.
2. Provide your firm's anticipated design schedule this project.

G. Quality assurance and control:

Describe methods or procedures your firm has used to provide assurance and control of quality on past projects and include how your firm will achieve quality for this project.

H. Project Management Approach.

Describe the methods and procedures your firm will utilize to keep the project on time, on schedule, and on budget.

I. Include any other information your firm may feel is pertinent.

\* Regarding reference projects, information submitted must include project sponsoring agency name, address, and phone number; and a contact person with phone number (if different than above) is desirable.

Three (3) copies of your RFQ response submittal for this project must be received no later than 2:00 p.m., local time, **November 26, 2013**. Submittals should be clearly labeled as **St. Charles City Flashing Yellow Arrow Signal Improvement Project**.

Submit information to:

Tyson King, P.E.  
Project Manager  
City of St. Charles  
200 North Second Street, Room 202  
St. Charles, MO 63301

We thank you for your interest in this project and should you have any questions, please feel free to contact me at 636-949-3229, via email at [tyson.king@stcharlescitymo.gov](mailto:tyson.king@stcharlescitymo.gov).

Sincerely,

Tyson King, P.E.  
Project Manager

Cc: Kevin Corwin, P.E., PLS, City Engineer  
Eric Allmon, P.E., Sr. Project Manager – Design

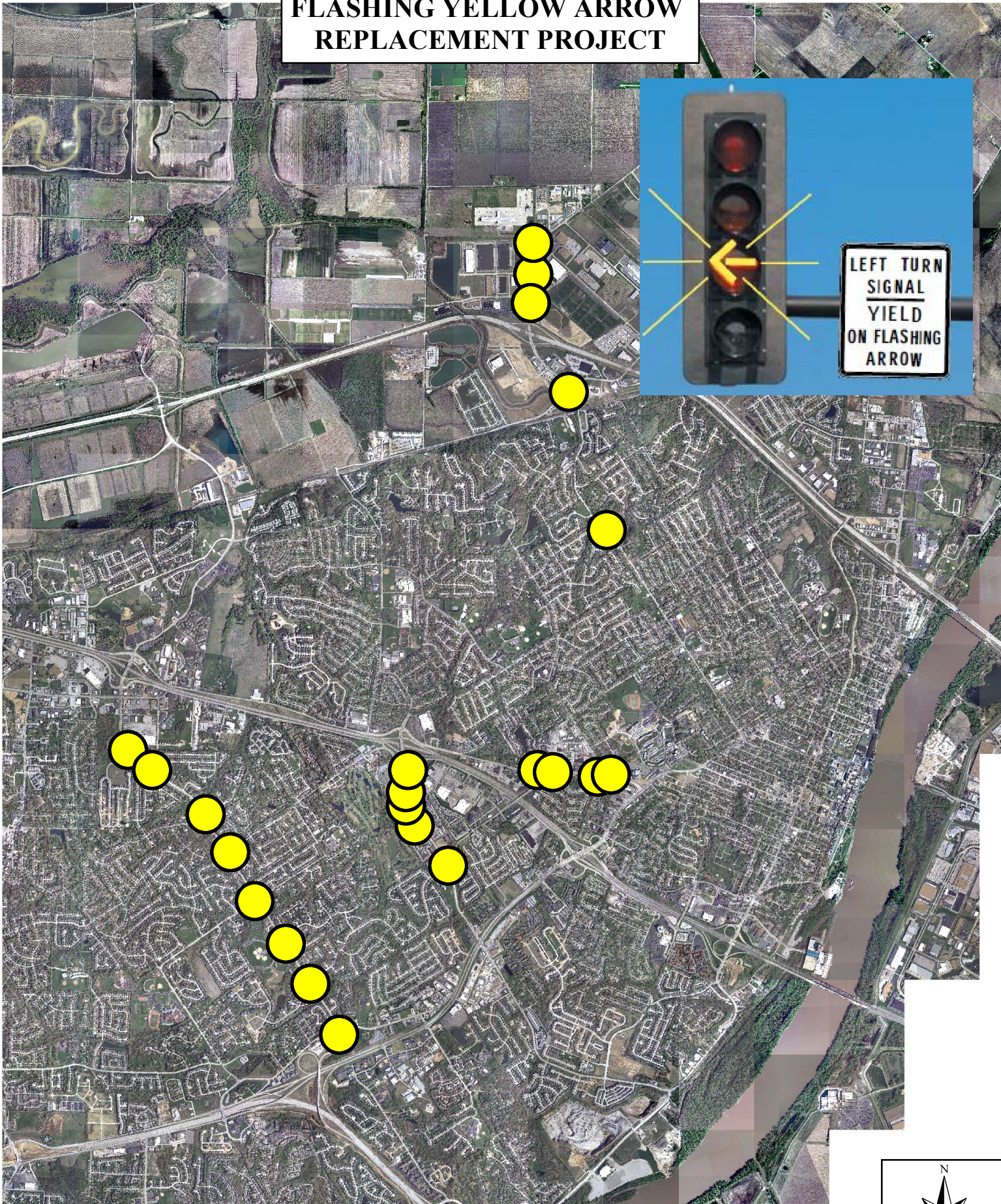
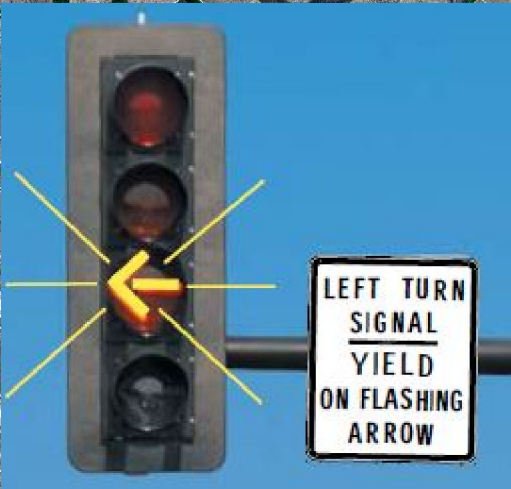
Enclosures:

Project Location Map  
East West Gateway TIP Application  
Project Charter  
Scoring Criteria for Selection

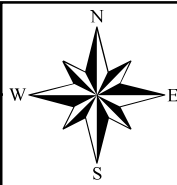
<i>City of St. Charles, St. Charles County, Flashing Yellow Arrow Signal Improvement Project</i>	
Federal Aid No.:	CMAQ-7302(652)
Location:	Citywide
Proposed Improvement:	Traffic Signals
Length:	0.10 miles
Approximate Construction Cost:	\$240,000
DBE Goal Determination	10%
Consultant Services Required:	<p>The engineering responsibilities may include but are not limited to the following:</p> <p>The preparation of Preliminary plans, and Contract plans. Design services may include, right of way plans, surveying, geotechnical investigations, public involvement, environmental and historic preservation services/permits, contract documents, assisting with the bidding process, construction support/construction inspection, utility coordination/permits and traffic controls including the preparation of PS&amp;E and final documents.</p>
Other Comments:	
Contact:	<p>Tyson King, P.E.  Project Manager  City of St. Charles  200 North Second Street, Room 202  St. Charles, MO 63301  Phone: 636-949-3229  Email: tyson.king@stcharlescitymo.gov</p>
Deadline:	2:00 pm, November 26 2013
Submit <ul style="list-style-type: none"> <li>• Statement of Qualifications</li> <li>• Affidavit of Compliance with the federal work authorization program</li> <li>• E-Verify Memorandum of Understanding</li> </ul>	



**CITY OF ST. CHARLES  
FLASHING YELLOW ARROW  
REPLACEMENT PROJECT**



 **PROPOSED IMPROVEMENT LOCATION**





C13-113

**FY 2014-2017 TRANSPORTATION IMPROVEMENT PROGRAM  
CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT (CMAQ) FUNDS  
NEW PROJECT APPLICATION**

Clear Form and Create New Project

Retrieve Existing Project

Update/Save Project

**PROJECT RECORD NUMBER** 4738838

Clear All Fields

*Before starting new applications, select "Clear Form and Create New Project". Applications with no record number cannot be saved. The project number will be needed if you wish to retrieve/edit/print the application at a later time.*

Select one:

- ☐ In progress
  - ☐ Preliminary complete (ready for comments)- Due February 15, 2013
  - ☒ Final complete - Due March 8, 2013
- Signatures, Supplemental Information, and Application Fee - Due March 8, 2013

**A. SPONSOR INFORMATION**

Sponsoring Agency: City of St. Charles

Chief Elected Official: Mayor Sally A. Faith

Address: 200 N Second Street

City: St. Charles State: MO Zip: 63301

Email: sally.faith@stcharlescitymo.gov

Project Contact: Kevin Corwin, PE Title: City Engineer

Address: 200 N Second Street

City: St. Charles State: MO Zip: 63301

Phone: 636-949-3513 Fax: 636-940-4601

E-mail: kevin.corwin@stcharlescitymo.gov

Application Contact: Tyson King, PE

E-Mail: tyson.king@stcharlescitymo.gov Phone: 636-949-3229

**B. PROJECT INFORMATION**

Project Title: City of St. Charles Flashing Yellow Arrow Traffic Flow Improvements

Project Limits (i.e., Taylor Ave to Moss St or over Moss Creek - include map.):

See additional information for intersection locations.

Is this project a continuation of, or is it otherwise related to, another project that previously was programmed in the TIP? If so, explain this relationship.

No

Has your agency previously competed for funds for this specific project? If so, when?

No

Does your agency own and maintain this facility? ☐ Yes ☐ If no, a letter of support is required from the facility owner.

Project Length (Miles):

Federal Functional Roadway Classification ( per East-West Gateway):

(URL for functional classification maps: <http://www.ewgateway.org/trans/funcclass/funcclass.htm>)

#### Right of Way

Will additional right of way or easement be acquired?:

If yes, give details below:

- Estimated additional right of way (in acres) needed:

- Estimated permanent easements (in acres) needed:

- Estimated temporary easements (in acres) needed:

- Any residential or commercial displacements anticipated? If yes, give details on how many and if they are residential and/or commercial.

No displacements anticipated.

Right of way acquisition by:

Right of way condemnation by:



### Utility Coordination

Will coordination with utilities be required? ☐ No ☐ If yes, check the appropriate box to select the type of utility. Then give the names of the utility companies.

Electric	<input type="checkbox"/>	
Phone	<input type="checkbox"/>	
Gas	<input type="checkbox"/>	
Water	<input type="checkbox"/>	
Cable TV	<input type="checkbox"/>	
Storm Sewer	<input type="checkbox"/>	
Sanitary Sewer	<input type="checkbox"/>	
Other	<input type="checkbox"/>	

Please give detail concerning potential utility conflicts / problems / issues:

The project entails signal improvements and will not require any excavation or expanded limits.

Utility coordination completed by:

### Intelligent Transportation Systems (ITS) Architecture:

Projects must comply with the regional ITS standards as set forth in the document titled *Bi-State St. Louis Regional ITS Architecture*, April 2005

## C. PROJECT JUSTIFICATION

Please describe 1.) the proposed improvement, 2.) the transportation problem the improvement will address, 3.) the effect the improvement will have on the problem.

Be as specific as possible. Attach additional sheets as needed.

This project will install 3-section (permissive only) and 4-section (protected/permissive) Flashing Yellow Arrow (FYA) Left Turn signal heads, along with associated signing and signal cabinet modifications, in order to provide safer and more efficient arterial roadways within the City of St. Charles.

Existing 5-section signal heads will be replaced with 4-section signal heads including a Flashing Yellow Arrow, to allow for dynamic signal timing plans based upon time of day or presence of left-turning vehicles. Typical 5-section signal heads do not allow for operational efficiencies related to lead-lag protected-permissive signal timing plans, unless certain steps are taken to reduce driver confusion concerning the display of the opposing direction (i.e. signing or signal face modifications).

Additionally, a portion of existing protected-only left turn signals will be replaced with a 4-section FYA left turn signal head, to provide a permissive movement for left turning vehicles during times of day when opposing traffic flows allow. These locations previously received a protected-only movement 24 hours per day, in order to account for the needed protected left turn during a relatively small amount of time during a peak period. All protected-only left turn signals that meet Left Turn Safety Warrants (inadequate sight distance, high operating speed, too many opposing through lanes) will remain as a protected 3-section protected-only left turn signal indication.

Beyond the congestion reduction benefits, and elimination of unnecessary stops, FYA retrofit projects have shown a dramatic safety improvement at locations across the country. For example, NCHRP Web Only Document 123 (<http://itri.tsu.edu/TXDOT6568/15.pdf>) indicated significant reductions in left turn related crashes due to the installation of FYA indications. This report followed another comprehensive study (NCHRP 493, [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rpt\\_493.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_493.pdf)) found that displays with exclusive heads were found to offer the higher ratings in terms of safety, operations, human factors, and versatility. Additionally, several state and local governments have begun to prepare before/after studies related to the impact of FYA installations. One such study completed by the Oregon DOT displayed an average annual reduction in left turn related crashes of 67%, showing that FYA installations not only save time, but also property and potentially lives.

The proposed FYA corridors for this project include several roadways carrying relatively high amounts of traffic, with regularly spaced signalized intersections:

Muegge Road - from Mexico Road to Old Route 94  
Zumbehl Road - from Veterans Memorial Parkway to Hawks Nest Drive  
West Clay Street - from Westbury Drive to Droste Road  
Elm Street - from Hunters Ridge Road to Mueller Road

It should be noted that each of the corridors listed above are in the process of being upgraded as part of the Gateway Greenlight project, administered by St. Charles County. Each of the intersections proposed to receive Flashing Yellow Arrow retrofits will also receive (via Gateway Greenlight projects) new or upgraded signal controllers necessary to accommodate FYA signal timing, as well as communication connections to the new central signal system in development by TransCore. The Gateway Greenlight improvements allow for the full benefit of FYA installations to be realized, as coordinated systems can be put in place, and operation can be monitored in real time.

Please see attachments for additional project justification.

### Type of Project

Check the box below that best describes the primary benefit of the proposed improvement. More information can be found in Appendix A of the CMAQ workbook.

#### *Transit*

- ☐ System Startup
- ☐ Transfer Center
- ☐ Vehicle Replacement
- ☐ New Vehicle
- ☐ Park-and-Ride Facilities
- ☐ Other (specify):

#### *Ride Share*

- ☐ Rideshare Program
- ☐ Vanpool/Carpool Program
- ☐ Park-and Ride Facilities
- ☐ Reverse Commute Program
- ☐ Other (specify):

#### *Demand Management*

- ☐ Transportation Management Assoc.
- ☐ Transit Pass Subsidy
- ☐ Transit Information/Marketing
- ☐ Educational Program
- ☐ Other (specify):

#### *Traffic Flow Improvements*

- ☐ Traffic Signal Interconnect
- ☐ Traffic Signal Replacement
- ☐ New Traffic Signals
- ☐ Signal Controller Upgrades
- ☒ Intersection Improvements
- ☐ Roadway Bottleneck Elimination
- ☐ Other (specify):

#### *Pedestrian and Bicycle Program*

- ☐ Bicycle Parking Improvements
- ☐ Bicycle Lanes
- ☐ Pedestrian Ways
- ☐ Other (specify):

#### *Inspection Maintenance Program*

- ☐ Roadside Emission Testing
- ☐ Enhanced I-M Program
- ☐ Mechanic Training Program
- ☐ Other (specify):

### **D. EMISSIONS DATA (REQUIRED)**

Attach all applicable data identified in the Data Requirements Matrix (at the end of this application) for the type of project being proposed. Provide all information as completely as possible from the area of primary benefit. Please contact East-West Gateway staff if any of the information requested is unclear or unavailable, or if there are questions concerning applicability. A summary of the emissions data is required (one to two pages). Additional project data may be submitted and is encouraged.

**Note:** East-West Gateway staff will calculate the emission reduction(s).



## D. FINANCIAL PLAN

Please complete the following expenditure tables and attach a detailed cost estimate (an example is included in Appendix B of the workbooks).

Federal funds must not exceed 80% of the total cost. Fiscal years are federal fiscal years (October 1 through September 30). In Illinois, federal funds are available for FY 2014. In Missouri, federal funds are available for FY 2014 and FY 2015.

PROJECT BUDGET	FY 2014	FY 2015	FY	TOTAL
PE/Planning/ Environ. Studies	60000.00			60000.00
Right-Of-Way				0.00
Implementation		230000.00		230000.00
Construction Engineering		10000.00		10000.00
Implementation Total	0.00	240000.00	0.00	240000.00
<b>PHASE TOTAL</b>	<b>60000.00</b>	<b>240000.00</b>	<b>0.00</b>	<b>300000.00</b>

SOURCE OF FUNDS	FY 2014	FY 2015	FY	TOTAL
CMAQ Funds	48000.00	192000.00		240000.00
Other Fed. Funds* Source:				0.00
Other State Funds* Source:				0.00
Local Match Funds* Source: City Funds	12000.00	48000.00		60000.00
Other Funds* Source:				0.00
<b>TOTAL</b>	<b>60000.00</b>	<b>240000.00</b>	<b>0.00</b>	<b>300000.00</b>

Will any other individual, business, local public agency or other third party provide matching funds or be requested to provide matching funds in the future for this project? If yes, include a letter of support for this project from the third party that confirms their commitment to provide match or acknowledges that the sponsor may seek matching funds from the third party in the future. The letter must also document the third party's support of the proposed scope of work of the project as it is listed in the project application.

**Standard TIP Project Development Schedule Form (many stages can occur concurrently)**

<b>Activity Description</b>	<b>Start Date (MM/YYYY)</b>	<b>Finish Date* (MM/YYYY)</b>	<b>Time Frame (Months)</b>
Receive Notification Letter	07/2013	08/2013	1.0
Execute Agreement (Project sponsor & DOT)	08/2013	12/2013	4.0
Engineering Services Contract Submitted & Approved <sup>1</sup>	12/2013	01/2014	1.0
Obtain Environmental Clearances (106, CE-2, etc.)	01/2014	03/2014	2.0
Public Meeting/Hearing			
Develop and Submit Preliminary Plans	03/2014	05/2014	2.0
Preliminary Plans Approved	05/2014	06/2014	1.0
Develop and Submit Right-of-Way Plans			
Review and Approval of Right-of-Way Plans			
Submit & Receive Approval for Notice to Proceed for Right-of-Way Acquisition (A-Date) <sup>2</sup>			
Right-of-Way Acquisition			
Utility Coordination	01/2014	09/2015	21.0
Develop and Submit PS&E	06/2014	07/2015	13.0
District Approval of PS&E/Advertise for Bids <sup>3</sup>	07/2015	09/2015	2.0
Submit and Receive Bids for Review and Approval	09/2015	12/2015	3.0
Project Implementation/Construction	12/2015	08/2016	8.0

**\*Finish date must match fiscal year for each for each milestone listed below:**

- 1. Preliminary engineering obligated - PE/Planning/Environ. Studies**
- 2. Right of way obligated - Right-Of-Way**
- 3. Construction/implementation funds obligated - Implementation/Construction Engineering**

**FY 2014 = 10/2013 - 09/2014**

**FY 2015 = 10/2014 - 09/2015**

**FY 2016 = 10/2015 - 09/2016**

**FY 2017 = 10/2016 - 09/2017**

***Financial Certification of Matching Funds***

This is to assure sufficient funds are available to pay the non-federal share of project expenditures for the following projects to be funded under the provisions of MAP-21. Only one certification per sponsoring agency is necessary.

**Project Title**

**Non-federal Amount**

City of St. Charles Flashing Yellow Arrow Traffic Flow Improvements

60000.00

Sponsoring Agency: City of St. Charles

**Chief Elected Official (or Chief Executive Officer):**

Name (Print): Mayor Sally A. Faith

Signature:

*Sally A. Faith*

Date:

*3/7/13*

Attest:

*[Signature]*

City Clerk

**Chief Financial Officer:**

Name (Print): Kelly Vaughn

Signature:

*Kelly Vaughn*

Date:

*3/5/13*



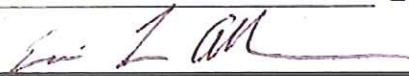


### ***E. Person of Responsible Charge Certification***


The key regulatory provision, 23 CFR 635.105 – *Supervising Agency*, provides that the State Transportation Agency (STA) is responsible for construction of Federal-aid projects, whether it or a local public agency (LPA) performs the work. The regulation provides that the STA and LPA must provide its full-time employee to be in “responsible charge” of the project.

The undersigned employees(s) of the Project Sponsor will act as person of responsible charge. If at any point the employee leaves the LPA, the LPA is responsible for finding a suitable replacement and notifying East-West Gateway. If the person of responsible charge is found to not be a full-time employee of the LPA, it will result in the loss of federal funds for this project. One employee can act as person of responsible charge for all three phases.


#### **Person of responsible charge – design phase**

Name: Eric Allmon, PE  
Title: Sr. Project Manager E-mail: eric.allmon@stcharlescitymo.gov  
Signature: 

#### **Person of responsible charge – right of way acquisition phase**

Name: Brian Faust, IFAS  
Title: Right of Way Specialist E-mail: brian.faust@stcharlescitymo.gov  
Signature: 

#### **Person of responsible charge – construction phase**


Name: Stephen Noonan, PE  
Title: Sr. Project Manager E-mail: stephen.noonan@stcharlescitymo.gov  
Signature: 

***F. Title VI Certification***

The Project Sponsor shall comply with all state and federal statutes relating to nondiscrimination, including but not limited to Title VI and Title VII of the Civil Rights Act of 1964, as amended (42 U.S.C. §2000d and §2000e, et seq.), as well as any applicable titles of the "Americans with Disabilities Act" (42 U.S.C. §12101, et seq.). In addition, if the Grantee is providing services or operating programs on behalf of the Department or the Commission, it shall comply with all applicable provisions of Title II of the "Americans with Disabilities Act".

The undersigned representative of the Project Sponsor hereby certifies that it has policies and procedures in place to comply with Title VI of the Civil Rights Act of 1964.

Name Michael Spurgeon

Signature  For MLS

**G. Right-of-Way Acquisition**

To be completed by Missouri project sponsors only.

The Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA) have the right and responsibility to review and monitor the acquisition procedures of any federally funded transportation project for adherence to The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Those projects found in non-compliance may jeopardize all or part of their federal funding.

A. The Project Sponsor hereby certifies that ANY right of way, and/or permanent or temporary easements necessary for this project, obtained prior to this application, were acquired in accordance with The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

B. The Project Sponsor also certifies that any additional right of way, and/or permanent or temporary easements, subsequently required to complete the project, will be acquired according to The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

*Sally A. Faith* 3/7/13  
Certification Signature  
*SALLY A. FAITH - MAYOR*

Attest:  
*Shirley A. [Signature]*  
City Clerk





## H. Reasonable Progress

To be completed by Missouri project sponsors only.

Attached is a copy of the reasonable progress policy adopted by the East-West Gateway COG Board of Directors.

The undersigned representative of the Project Sponsor hereby certifies that he/she has read this policy and understands its requirements. The representative acknowledges that failure to meet all of the reasonable progress requirements could result in federal funds being revoked and returned to the regional funding pool, as dictated by the policy.

Certification Signature:

Sally A. Faith 3/7/17  
SALLY A. FAITH

Attest:

[Signature]  
City Clerk



## Policy on Reasonable Progress

### Reasonable Progress

For projects or programs included in the Transportation Improvement Program, “reasonable progress” will have been made if the project has advanced to the point of obligating all federal funds programmed for that project in the current fiscal year, regardless of the phase of work (i.e., Preliminary Engineering (PE), Right of Way Acquisition (ROW), or Plans Specifications and Estimates (PSE)/Construction). If a project fails to obligate the programmed federal funds by September 30 of the current year, the funding will be forfeited and returned to the regional funding pot. Actual progress toward implementation is measured against the schedule submitted by the project sponsor in the project application.

### Policy Procedures and Enforcement

Projects that do not obligate all federal funds by the September 30 suspense date will be removed from the TIP, and the federal funds associated with those projects will be returned to the regional funding pool for redistribution. The removal of projects from the TIP will require no further Board action and the sponsor would have to repay any federal funds already spent if the funding is forfeited.

If a project is realizing delays that will put the federal funding at risk of forfeiture (i.e., not meet a September 30 deadline), the project sponsor will have the opportunity to ask for consideration of a “one-time extension” in their project schedule. The one-time extension can only be requested for the implementation/construction phase of the project. The extension request will only be considered once a year, and has to be made before June 1 of the current fiscal year of the TIP.

To be considered for this extension the sponsor has to demonstrate on all counts: a.) The delay is beyond their control and the sponsor has done diligence in progressing the project; b.) Federal funds have already been obligated on the project or in cases that no federal funds are used for PE and/or ROW acquisition, there has been significant progress toward final plan preparation; c.) There is a realistic strategy in place to obligate all funds.

One-time extensions of up to three (3) months may be granted by East-West Gateway staff and one-time extensions greater than three (3) months, but not more than nine (9) months, will go to the Board of Directors for their consideration and approval. Projects requesting schedule advancements will be handled on a case-by-case basis (subject to available funding) and are subject to the Board adopted rules for TIP modifications.



## Policy on Reasonable Progress

### Project Monitoring

An extensive monitoring program has been developed to help track programmed projects and ensure that funding commitments and plans are met. Monthly reports are developed and posted on the East-West Gateway website, utilizing project information provided by the IDOT and MoDOT District offices. Additionally, project sponsors are contacted, at least every three months, by EWGCOG staff for project status interviews.



# Data Requirements Matrix

## Transit Improvements

## System Start Up

Transfer Center

## Vehicle Replacement

**New Vehicle**

## Park-Ride Facilities

### Feeder System

Other

## Shared Ride Services

## Rideshare Programs

### Vanpool/carpool Programs

### Reverse Commute Program

### Park-Ride Facilities

Other

## Demand Management Strategies

Transportation Mgt Assoc

### Transit Pass Subsidy

Transit Information/Marketing

## Educational Programs

Other

[illegible]

# Data Requirements Matrix (continued)

## Traffic Flow Improvements

## Traffic Signal Interconnect

### Traffic Signal Replacement

## New Traffic Signals

## Signal Controller Upgrades

## Intersection Improvements

## Roadway Bottleneck Elimination

ST

Other

## Pedestrian & Bicycle Improvement

## Bicycle Parking Improvements

## Bicycle Lanes

## Pedestrian Ways

Education Program

Other

## Inspection Maintenance

## Roadside Emission Testing

## Enhanced I-M Program

Mechanic Training Program

Other

[illegible]

# Data Requirements – FY14-FY15 CMAQ Flashing Yellow Arrow Traffic Flow Improvements

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## Average Daily Traffic

Elm Street – 17,800 veh/day  
Muegge Road – 18,700 veh/day  
Zumbehl Road – 35,120 veh/day  
West Clay Street – 18,045 veh/day

## Posted Speed Limit

Elm Street – 30 mph  
Muegge Road – 35 mph  
Zumbehl Road – 35 mph  
West Clay Street – 35 mph

## Project Length

Elm Street – 3.1 miles  
Muegge Road – 2.8 miles  
Zumbehl Road – 1.2 miles  
West Clay Street – 1.9 miles

## Speed (present, after)

Elm Street – 18.6 mph  
Muegge Road – 21.7 mph  
Zumbehl Road – 21.7 mph  
West Clay Street – 21.7 mph

Typical average corridor speeds for facilities of this level serving the above traffic volumes typically range from 35% to 50% of the posted speed limit, due to the influence of control delay. The above speed for each road way assumes such a reduction.

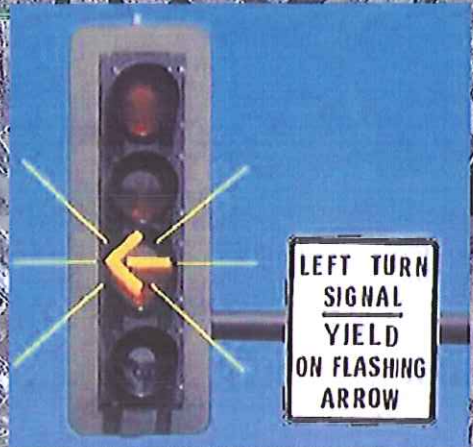
## Average Delay Per Vehicle

The attached before/after impact study of FYA installations, completed by MoDOT St. Louis staff in 2011, examined the various measures of effectiveness related to improved signal operations. Reductions in control delay on the corridors studied showed a decrease of 3%-12%, with some outliers into the 20%-40% range. Utilizing a conservative percentage decrease of 5%, and applying to a representative intersection included in this project (Elm Street at Elm Point Industrial Drive), results in the reduction in control delay as shown below:

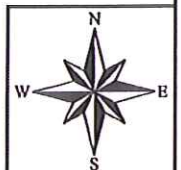
Average Delay Per Vehicle (before) – 21.8 seconds  
Average Delay Per Vehicle (after) – 20.7 seconds



**CITY OF ST. CHARLES  
FLASHING YELLOW ARROW  
REPLACEMENT PROJECT**



**PROPOSED IMPROVEMENT LOCATION**





City of St. Charles  
**FLASHING YELLOW ARROW CONVERSION**  
 Opinion of Probable Cost  
 3/6/2013

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
Elm Street Corridor Intersections	5.00	EA	\$ 9,000.00	\$ 45,000.00
Muegge Road Corridor Intersections	8.00	EA	\$ 9,000.00	\$ 72,000.00
Zumbehl Road Corridor Intersections	5.00	EA	\$ 9,000.00	\$ 45,000.00
West Clay Street Corridor Intersections	4.00	EA	\$ 9,000.00	\$ 36,000.00
			<b>Subtotal</b>	<b>\$ 198,000.00</b>

Contingency (20%)	\$	39,600.00
Consultant Design	\$	60,000.00
Construction Total	\$	237,600.00
<b>Rounded Total</b>	<b>\$</b>	<b>240,000.00</b>

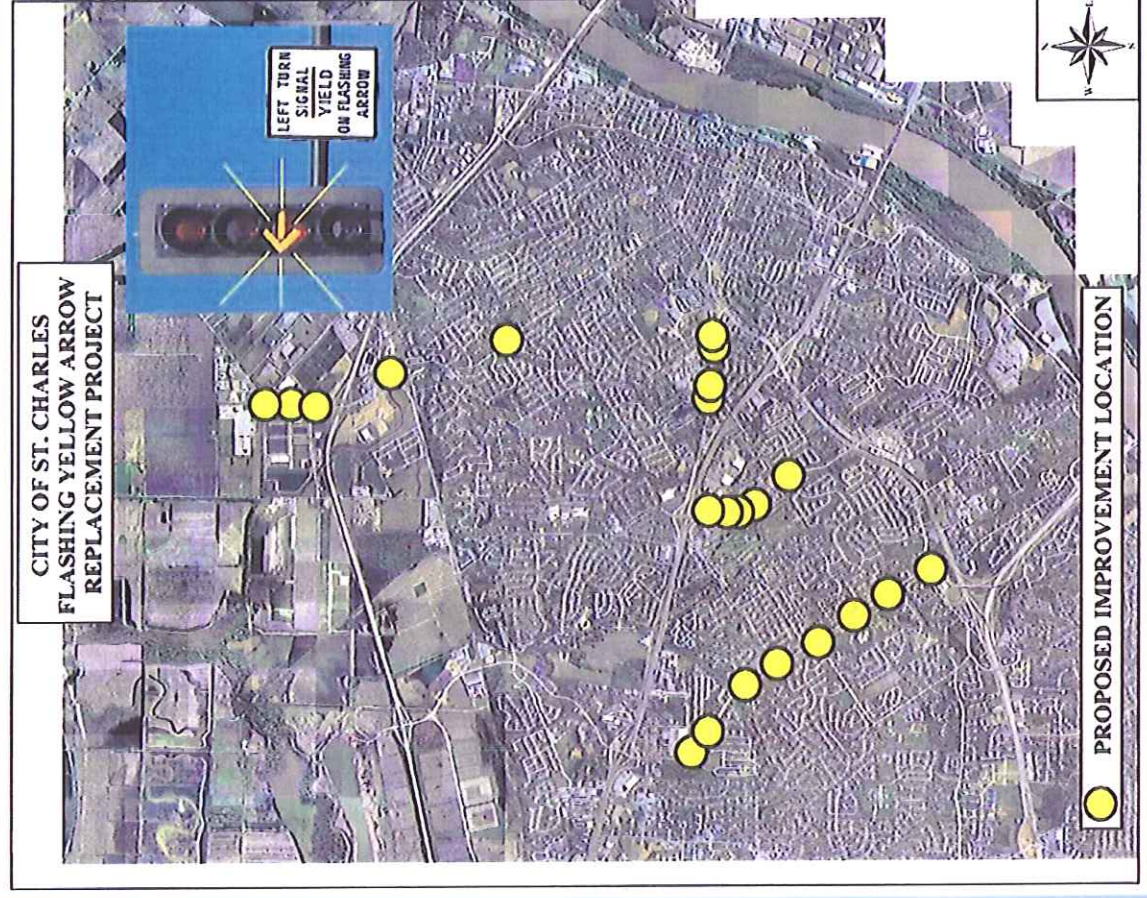
# FLASHING YELLOW ARROW SIGNAL IMPROVEMENTS

- **GOAL OF PROJECT:** Improve traffic flow
- **PROJECT DESCRIPTION:** National studies have demonstrated that the use of Flashing Yellow Left Arrows can reduce crashes from left turning vehicles, and allow for more flexibility of signal timing, leading to an overall safer and more efficient intersection.
- **PROJECT LIMITS:** City Wide
- **ESTIMATED COST:** \$300,000
- **OUTSIDE FUNDING:** TBD
- **SCHEDULE:**

Design:	2016
Construction:	2017



# FLASHING YELLOW ARROW SIGNAL IMPROVEMENTS



**CAPITOL ADDRESS**

State Capitol  
201 West Capital Avenue, Room 315  
Jefferson City, MO 65101-6806  
Tele: 573-751-3717  
E-mail: Anne.Zerr@house.mo.gov

**HOME ADDRESS**

1160 Lancaster Dr.  
St. Charles, MO 63301  
Tele: 636-373-0952

**MISSOURI HOUSE OF REPRESENTATIVES****Anne Zerr**

State Representative  
District 65

**COMMITTEES**

Economic Development – Chair

**Member:**

Appropriations – Health, Mental Health  
and Social Services

Appropriations – Revenue,  
Transportation and Economic  
Development

Administration & Accounts

Tourism & Natural Resources

Joint Committee on

Life Sciences

February 27, 2013

Kevin Corwin  
City Engineer  
City of St. Charles  
200 N. Second Street  
St. Charles, MO 63301

Dear Kevin:

Please accept this letter of support for the City of St. Charles' Flashing Yellow Arrow  
Signal Replacement Project.

The Flashing Yellow Arrow signal replacement project will provide increased safety at  
the most critical intersections in the City of St. Charles, and will improve the flow of  
traffic by allowing for greater left turning volume at these signalized locations.

Thank you for your consideration,



Anne Zerr



**DISTRICT OFFICE**  
PO Box 62  
St. Peters, MO 63376  
Telephone (636) 294-2526

**CAPITOL OFFICE**  
State Capitol, Room 326  
Jefferson City, MO 65101-6806  
Telephone (573) 751-1141  
Fax (573) 522-3383  
tom.dempsey@senate.mo.gov

**MISSOURI SENATE**  
**President Pro Tem**  
**Tom Dempsey**  
District 23

January 31, 2013

Kevin Corwin  
City Engineer  
City of St. Charles  
200 N. Second Street  
St. Charles, MO 63301

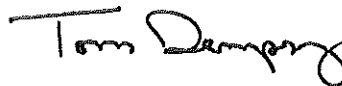
Dear Kevin:

Please accept this letter of support for the City of St. Charles' Flashing Yellow Arrow Signal Replacement Project. This is clearly a project that will provide numerous benefits for our community and region.

The Flashing Yellow Arrow signal replacement project will provide increased safety at the most critical intersections in the City of St. Charles and will improve the flow of traffic by allowing for greater left turning volume at these signalized locations.

I look forward to continuing to work with you and other key partners to ensure an improved transportation system is in place to provide long-term benefits for our region.

Sincerely,



Tom Dempsey

TD/kd



## Public Works Department Project Charter

---

**Project Name:** Flashing Yellow Arrow Signal Improvements  
**Department:** Public Works  
**Division:** Engineering  
**Project Number:** 13STR10, CMAQ-7302(652)  
**Account Number:** 410-500-501-873-111  
412-500-501-873-111

---

### Prepared By

Document Owner(s)	Project/Organization Role
Tyson King	Project Manager

### Project Charter/PMP Version Control

Version	Date	Author	Change Description
<a href="#">Charter V1</a>	<a href="#">9/10/13</a>	TWK	<ul style="list-style-type: none"><li>Initial Charter Creation</li></ul>

### Online Project Plan

Status	Date	Author	Details
<a href="#">Planning</a>	<a href="#">9/12/13</a>	TWK	<ul style="list-style-type: none"><li>ProjectManager.com setup</li></ul>

## TABLE OF CONTENTS

<b>PROJECT CHARTER .....</b>	<b>1</b>
<b>1 PROJECT CHARTER/PMP PURPOSE .....</b>	<b>4</b>
<b>2 PROJECT PURPOSE AND OVERVIEW .....</b>	<b>4</b>
<b>3 PROJECT TEAM .....</b>	<b>4</b>
3.1 [PMP – Organizational Chart] .....	5
3.2 [PMP – Communications Plan] .....	5
<b>4 PROJECT SCOPE STATEMENT .....</b>	<b>5</b>
4.1 Goals and Objectives .....	5
4.2 Statements of Work (SOW) .....	5
4.3 Milestones and Deliverables .....	6
4.4 Out of Scope .....	6
4.5 Project Funding .....	6
4.6 [PMP – Work Breakdown Structure] .....	6
4.7 [PMP – Time Management Plan] .....	7
4.8 [PMP – Cost Management Plan] .....	7
4.9 [PMP – Change Management Plan] .....	7
<b>5 PROJECT CONDITIONS .....</b>	<b>7</b>
5.1 Issues List .....	7
5.2 Risk Register .....	8
5.3 Stakeholder Input Summary .....	8
5.4 [PMP – Issue and Risk Management Plan] .....	9
<b>6 PROJECT STANDARDS .....</b>	<b>9</b>
6.1 Standards .....	9
6.2 Permits/Outside Approvals .....	9
6.3 Notes .....	9
<b>7 APPROVALS .....</b>	<b>9</b>

<b>8</b>	<b>APPENDICES.....</b>	<b>10</b>
8.1	Project Map .....	10
8.2	Project Organization Chart.....	10
8.3	Project Communications Plan.....	10
8.4	Default Project Reports .....	10
8.4.1	Status Report .....	10
	(Generated Online) .....	10
8.4.2	Milestone Report .....	10
8.4.3	Cost Report .....	10
8.5	Executed Consultant Contract(s).....	10

## 1 PROJECT CHARTER/PMP PURPOSE

The project charter defines the vision, goals, scope, objectives, constraints, and overall approach for the work to be completed as part of this project. It is a critical element for initiating, planning, executing, controlling, and assessing the project. In addition, it serves as an agreement between the Project Team stating what will be delivered according to the budget, time constraints, risks, resources, and standards agreed upon for the project.

## 2 PROJECT PURPOSE AND OVERVIEW

The project will install 3-section (permissive only) and 4-section (protected/permissive) Flashing Yellow Arrow (FYA) Left Turn signal heads along with associated signing and cabinet modifications, in order to provide safer and more efficient arterial roadways within the City of St. Charles. Each signal included in the project will be evaluated for the replacement of any existing 3-section protected only signal heads with a 4-section FYA signal head, in order to allow for permissive phasing during timeframes when opposing volumes allow. Corridor timing plans will be updated to account for the operational efficiencies allowed by implementation of FYA along a coordinated route.

The signalized intersections incorporated within the project include those found within the following routes, bounded by the noted end points. A total of 22 intersections will be studied with the project.

- Muegge Road – from Mexico Road to Old Route 94
- Zumbahl Road – from Veterans Memorial Parkway to Hawks Nest Drive
- West Clay Street – from Westbury Drive to Droste Road
- Elm Street – from Hunters Ridge Road to Mueller Road

## 3 PROJECT TEAM

Project Team Role	Project Team Member(s)	Contact Information
Project Manager (City of St. Charles)	Tyson King	636-949-3229 <a href="mailto:tyson.king@stcharlescitymo.gov">tyson.king@stcharlescitymo.gov</a>
Senior Project Manager (City of St. Charles)	Eric Allmon	636-949-3353 <a href="mailto:eric.allmon@stcharlescitymo.gov">eric.allmon@stcharlescitymo.gov</a>
City Engineer (City of St. Charles)	Kevin Corwin	636-949-3237 <a href="mailto:kevin.corwin@stcharlescitymo.gov">kevin.corwin@stcharlescitymo.gov</a>
Sr. Project Manager - Construction (City)	Steve Noonan	636-949-3237 <a href="mailto:stephen.noonan@stcharlescitymo.gov">stephen.noonan@stcharlescitymo.gov</a>
Design Consultant	TBD	



### 3.1 [PMP – Organizational Chart]

Attach Org. Chart Exhibit

### 3.2 [PMP – Communications Plan]

Attach and/or specify online

## 4 PROJECT SCOPE STATEMENT

### 4.1 Goals and Objectives

Goals	Objectives
Improve Traffic Flow	<ul style="list-style-type: none"> <li>Implement lead-lag phasing along coordinated signal corridors where feasible.</li> <li>Allow permissive-only left turns for certain timeframes at locations previously set at protected-only at all times.</li> </ul>
Improve Vehicle Safety	<ul style="list-style-type: none"> <li>Provide intuitive signal display to convey when a driver must yield to oncoming traffic</li> <li>Clearly convey to left turning vehicles when opposing phase is ending</li> </ul>

### 4.2 Statements of Work (SOW)

SOW	Owner/Prime	Due Date/Sequence
MoDOT Consultant Solicitation	King	10/30/2013
Select Consultant	King	12/30/2013
Program Agreement	King	11/22/2013
MoDOT Design Contract Approval	King	1/17/2014
Preliminary Plan	Consultant	4/25/2014
MoDOT Preliminary Plan Approval	Consultant	5/16/2014
Final PS&E	Consultant	7/29/2014
MoDOT Final PS&E Approval	Consultant	9/5/2014
Bid	King	10/7/2014
Construction	Noonan	6/11/2015
Final Close Out	Noonan	7/30/2015

### 4.3 Milestones and Deliverables

Milestone	Deliverable
1. Program Agreement	<ul style="list-style-type: none"> <li>Executed MoDOT Program Agreement</li> </ul>
2. Consultant Contract	<ul style="list-style-type: none"> <li>Executed Contract</li> </ul>
3. MoDOT Consultant Contract Approval	<ul style="list-style-type: none"> <li>Federal Obligation of Design Funding</li> </ul>
4. Preliminary PS&E Submittal	<ul style="list-style-type: none"> <li>Preliminary Plans</li> <li>Preliminary Estimate</li> </ul>
5. Preliminary Plan Approval	<ul style="list-style-type: none"> <li>MoDOT Preliminary Plan Approval</li> </ul>
6. Environmental Classification	<ul style="list-style-type: none"> <li>Approved Environmental Clearance</li> </ul>
7. 106 Clearance	<ul style="list-style-type: none"> <li>Approved 106 Clearance</li> </ul>
8. Final Plan Submittal	<ul style="list-style-type: none"> <li>Final Plans</li> <li>Final Specifications</li> <li>Final Estimate</li> </ul>
9. Final Plan Approval	<ul style="list-style-type: none"> <li>Federal Obligation of Construction Funding and Authority to Advertise for Bids</li> </ul>
10. Bid	<ul style="list-style-type: none"> <li>Sealed Bids from Contractors</li> </ul>
11. MoDOT Concurrence in Award	<ul style="list-style-type: none"> <li>MoDOT Concurrence in Award and Federal Obligation of the Construction Contract</li> </ul>
12. Begin Construction	<ul style="list-style-type: none"> <li>Executed Construction Contracts</li> </ul>
13. Final Acceptance	<ul style="list-style-type: none"> <li>Lien Waivers, Final Invoice</li> </ul>
14. Final Project Approval	<ul style="list-style-type: none"> <li>Final Reimbursement Check</li> </ul>

### 4.4 Out of Scope

This project will not include major upgrades to intersections included in the project, including improvements such as signal reconstruction, geometric modifications, etc.

### 4.5 Project Funding

Source	FY 2014	FY 2015	FY2016	Confidence Level
City	\$12,000	\$48,000	\$	High
CMAQ	\$48,000	\$192,000	\$	High

### 4.6 [PMP – Work Breakdown Structure]

Specified online.  
Attach Executed Contracts

#### 4.7 [PMP – Time Management Plan]

Managed online. Schedule shall be updated as frequently as weekly

#### 4.8 [PMP – Cost Management Plan]

Cost estimates shall be stored online and provided at completion of the following tasks:  
Preliminary Plan and Final Plans

#### 4.9 [PMP – Change Management Plan]

Managed online.

### 5 PROJECT CONDITIONS

If an online project plan has already been created, issues and risks can be entered online with a printed summary attached to the project charter/PMP.

#### 5.1 Issues List

#	Description	Impact*	Priority*	Owner	Proposed Resolution
1	Federal funding requirements	Low	High	City	Project must be completed to the standards set forth in MoDOT's LPA Manual.
2	St. Louis District Traffic Approval	Low	Medium	City/Consultant	Coordination throughout the project will be necessary to ensure our work will meet MoDOT standards for FYA implementation.
3	Existing Vehicle Detection Replacement	Medium	High	City/Consultant	Fully actuated intersections are imperative for the benefit of FYA to be realized. Missing or poor vehicle detection may need to be improved.
4	Coordination with other projects involving these signals	Medium	Medium	City/Consultant	Other City projects, as well as future phases of the Gateway Green Light program will overlap with signals included in the FYA project
5	User understanding of FYA signal indications	High	Medium	City	Provide educational materials to potential users via the City website and presentations or handouts to interested groups such as high school driving courses or retirement centers

## 5.2 Risk Register

#	Description	Impact*	Likelihood*	Owner	Proposed Mitigation
1	MoDOT does not grant or is slow with plan approvals	High	Medium	City/Consultant	Communication with the MoDOT Local Roads department throughout the design process should help to minimize the chances of this occurring
2	Meeting MoDOT deadlines	High	Low	City/Consultant	Project schedule management will be necessary to ensure all deadlines are met.
3	Condensed Timeline for Design and Construction	Medium	High	City/Consultant	Involve MoDOT and EWGCOG in scheduling of fund obligation early in project development process

**\*Risk and Issue Criteria:**

Description	Impact	Priority	Likelihood
High	occurrence will have a substantial impact on the progress or result of the project	requires immediate follow-up and resolution	very likely to occur
Medium	occurrence will have an impact on the progress or result of the project, but within reasonable tolerances	requires follow-up before completion of next project milestone	may occur
Low	occurrence will have only minor impacts on the progress or result of the project	requires resolution prior to project completion	probably will not occur

## 5.3 Stakeholder Input Summary

Name	Organization	Role	Interests
City Council Members	City	Represent the citizens of the City.	An on time and on budget project.
MoDOT	MoDOT	Recommends Federal Fund Obligation.	A project that meets the original scope and is on time and on budget.

## 5.4 [PMP – Issue and Risk Management Plan]

Managed online

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## 6 PROJECT STANDARDS

### 6.1 Standards

- MoDOT LPA Manual
- St. Louis County Standard Plans and Specifications for Highway Construction
- MUTCD
- AASHTO “A Policy on Geometric Design of Highways and Streets”

### 6.2 Permits/Outside Approvals

- MoDOT Environmental Clearance
- SHPO 106 Permit

### 6.3 Notes

- Sample PS&E packages from other local agencies will be made available for use in design of the improvements.
- 

## 7 APPROVALS

Prepared by \_\_\_\_\_  
Project Manager

Approved by \_\_\_\_\_  
Consultant

\_\_\_\_\_  
Design Sr. Project Manager

\_\_\_\_\_  
City Engineer

\_\_\_\_\_  
Public Works Director

---



## APPENDICES

### **8.1 Project Map**

### **8.2 Project Organization Chart**

### **8.3 Project Communications Plan**

### **8.4 Default Project Reports**

#### **8.4.1 Status Report**

(Generated Online)

#### **8.4.2 Milestone Report**

#### **8.4.3 Cost Report**

### **8.5 Executed Consultant Contract(s)**

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**City of St. Charles**  
**Consultant Selection Criteria**  
**Project Name: Flashing Yellow Arrow Signal Improvements CMAQ-7302(652)**

Criteria	Weight	Responsive Firms													
		Firm 1		Firm 2		Firm 3		Firm 4		Firm 5		Firm 6		Firm 7	
		Raw Score (1-5)	Weighted Score	Raw Score (1-5)	Weighted Score	Raw Score (1-5)	Weighted Score	Raw Score (1-5)	Weighted Score	Raw Score (1-5)	Weighted Score	Raw Score (1-5)	Weighted Score	Raw Score (1-5)	Weighted Score
Experience in work required	15%		0		0		0		0		0		0		0
Record of the firm accomplishing the work on other projects in the required time	10%		0		0		0		0		0		0		0
QA/QC Plan	5%		0		0		0		0		0		0		0
Recent experience showing accuracy of construction project cost estimates	5%		0		0		0		0		0		0		0
Community relations including evidence of sensitivity to citizen concerns	5%		0		0		0		0		0		0		0
Consultant's thorough research and technical approach to the project	25%		0		0		0		0		0		0		0
Proposal meets the City's time requirements / project schedule	15%		0		0		0		0		0		0		0
Adequate staffing	10%		0		0		0		0		0		0		0
Project Management Approach	10%		0		0		0		0		0		0		0
<b>TOTAL</b>	<b>100%</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>

Summary